

# Public Works Department Transportation Division

# NEIGHBORHOOD TRAFFIC CALMING PROGRAM

Adopted July 1998 Revised December 2000 Revised October 2015

The City of Beaverton is committed to maintaining and improving the livability and safety of its residential neighborhoods. The City's neighborhood traffic calming program is designed to reduce the negative impacts of traffic on neighborhood streets and to improve safety. The program is a collaborative process with residents, City staff, and emergency agencies. It is based on years of implementation experience of jurisdictions in the United States and around the world. The goals and policies of the City's Transportation System Plan and Comprehensive Plan provide the policy foundation for the program; specific traffic calming goals and policies provide for implementation.

Traffic calming is defined as the combination of mainly physical measures that reduce the negative effects of motor vehicle use, alter driver behavior, and improve conditions for non-motorized street users.<sup>1</sup> The traffic calming program goals and objectives are:

## Neighborhood Traffic Calming Program Goals

- 1. Improve neighborhood livability.
- 2. Make efficient effective use of City resources.
- 3. Create safe and attractive streets for residents, pedestrians, bicyclists, motorists, and transit users.
- 4. Help reduce the negative effects of motorized vehicles on the environment.
- 5. Promote pedestrian, bicycle and transit use.

#### Neighborhood Traffic Calming Program Objectives

- 1. To achieve lower vehicle speeds in neighborhoods with identified speed problems.
- 2. To improve real and perceived safety for motorized and non-motorized users.
- 3. To promote pedestrian, bicycle and transit use.
- 4. To reduce cut-through traffic in neighborhoods.
- 5. To increase access for all modes and preserve reasonable emergency vehicle access.
- 6. To enhance the street environment.
- 7. To incorporate the preferences and needs of those using the street.

<sup>&</sup>lt;sup>1</sup> Lockwood, Ian M., "ITE Traffic Calming Definition", ITE Journal, July 1997.

Traffic calming measures include vertical changes in the street (e.g., speed humps, raised intersections), lateral changes in the street (e.g., chicanes), constrictions (e.g., street narrowing, islands, pinch points), narrow pavement widths (e.g., medians, edge treatments), traffic circles, small corner radii, gateway features, and landscaping.

#### **Procedures**

The procedures for the neighborhood traffic calming program are described in the **Procedures** element. The procedures are consistent with adopted Traffic Control Board, Traffic Commission, and City Council processes. The program is a phased program; the first phase is education and enforcement, the second is eligibility and prioritization for funding, and the third is design, testing, implementation, and evaluation. Neighborhoods are required to coordinate with the Transportation Division and Police Department for education, enforcement, and engineering strategies.

#### **Project Eligibility**

Screening of potential projects is necessary to determine whether there is a significant traffic problem in the neighborhood requiring traffic calming. The program's eligibility criteria are included in the *Eligibility Criteria* element. As with the procedures, the criteria are consistent with Beaverton's Draft Transportation System Plan, sound engineering practices, current City practice, coordination with affected agencies (i.e., emergency services, the Police Department), Beaverton's specific needs, and the experience of various jurisdictions currently implementing such programs nationwide.

## **Project Ranking**

As eligible projects proceed through the development and selection process, those supported by technical data and receiving neighborhood support are prioritized for funding. The ranking criteria and scoring process for funding is described in the *Project Ranking Criteria and Scoring Process* element. Again, this method is consistent with City programs and practices, and traffic calming program research.

# **PROCEDURES**

When a resident or neighborhood identifies a traffic problem they think should be addressed by the Neighborhood Traffic Calming Program, the following process shall be followed:

#### **PHASE ONE**

#### 1. Written Request:

An individual or neighborhood submits a written request for a traffic calming project to the City Traffic Engineer. The traffic problem is identified in the request.

#### 2. Information Sharing and Coordination:

<u>Information Sharing</u> - The City will assist neighborhoods interested in traffic calming by sharing information about the City's phased program. Staff are available for presentations.

<u>Coordination</u> - Education and enforcement is emphasized in Phase One by requiring neighborhoods to coordinate with the Police Department and Transportation Division as a first step.

Staff gathers preliminary data about the identified problem and works with the neighborhood to determine a primary approach; e.g., possible participation in Neighborhood Watch, use of the speed wagon or photo radar, or implementation of less restrictive engineering solutions such as signing or striping.

The Police Department and/or Transportation Division implement the approach. Effectiveness is monitored. If the approach is not appropriate to the problem, or if it is not considered effective after a six-month period, as determined by the City Traffic Engineer, the project area may be considered for inclusion in Phase Two of the Traffic Calming Program.

#### **PHASE TWO**

#### 3. Eligibility Determination:

Staff gather and analyze the traffic data for the project area. Traffic volume and speed data shall be collected for a period of seven days, 24-hours a day, during weekdays and weekends. Using the *Eligibility Criteria*, the City Traffic Engineer makes a determination of whether the project area is eligible for installation of traffic calming measures. The requestor(s) is notified of the eligibility determination.

## 4. Project Request:

If the project area is determined to be eligible, the requestor(s) is provided with a City project request petition form. The requestor(s) must gather signatures documenting support from a simple majority (51%) of all of the identified property owners, households and business owners within the Project Area. The petition will indicate that those signing want the City to consider a traffic calming project for the Project Area.

The City Traffic Engineer will determine the Project Area boundary based on the **Project Area Guidelines.** For each tax lot within the project area, only one person may sign the petition as a representative of the property owner(s). In addition, for each residential unit and each business in the project area, if the occupant of the unit is not the property owner, only one person may sign the petition as a representative of the tenant(s) of the unit.

#### 5. Project Funding Priority:

If the petition requirements are met, then staff prioritizes the Project Area for funding using the *Project Ranking Criteria and Scoring Process*. Petitions received by the Transportation Division by September 30 each year will be considered for potential funding for the following year. Each year the City Traffic Engineer presents the list of eligible projects to the Traffic Commission. The project(s) which receives the highest ranking is recommended for earliest funding through the City's Capital Improvement Program based on City resources.

# 6. Public Hearing at Traffic Commission Meeting:

The Traffic Commission holds a noticed public hearing using the adopted procedures for Major Issue. At the hearing, the Traffic Commission considers the City Traffic Engineer's recommendation for the project funding priority list and any appeals of the City Traffic Engineer's determination of eligibility. The appeal procedures are set forth in City Code section 6.02.065. The Traffic Commission recommends a prioritized funding list to Council for approval, and the top ranked project(s) for inclusion in the City's Capital Improvement Program for funding, based on available resources.

In making its recommendation, the Traffic Commission shall consider the project ranking criteria and any other factors that the Traffic Commission determines to be relevant. Other factors may include other projects which may change the street system, proposed changes to land uses, evidence of significant opposition to the traffic calming project and similar factors. The Traffic Commission recommendation is sent to Council. The requestor(s) shall be notified of the ranking of their project and the expected funding level using the Major Issue procedure. Council acts on the recommendation and makes the final decision on project ranking and funding level.

The funding list is updated annually to consider newly ranked projects. All ranked projects will remain on the funding list for up to 4 years. Each project's score will be

updated toward the end of its second year on the list. If after 4 years the proposed project has not received a high enough ranking to be funded, it will no longer be eligible for funding. This ensures that the project has not become obsolete due to changing traffic conditions or new residents in the area. A neighborhood, which has been dropped from the list, may choose to submit a new request.

#### **Funding Options:**

A neighborhood may choose to pay 100% of the project cost, or petition to form a Local Improvement District to fund the traffic calming project. Projects identifying an alternative funding option will be included on the funding list presented to the Traffic Commission in Step 6, to be considered for primary implementation and construction by the City. The project must have remained eligible throughout Steps 2 through 4.

Upon approval by the Council, projects funded 100% by the neighborhood may proceed ahead of other funded projects, subject to availability of the City resources required for the project. A neighborhood may choose this option at any point in the process after Step 4. Projects funded by the neighborhood must follow all steps of these procedures.

Project costs include the cost of construction, design, inspection, project management, and (if needed) the cost of right-of-way acquisition.

#### PHASE THREE

### 7. Project Development for Priority Project(s):

The City will host meeting(s) with neighbors in the Project Area, interested participants, residents, business owners and property owners. As a minimum, notice of the meetings shall be provided by signs similar to those used to give notice of Traffic Commission hearings.

At the meeting(s), staff present the traffic data, gather input, and discuss project design, neighborhood issues, and emergency access. Emergency service agencies will provide input to assure compliance with emergency access requirements. Through the meeting(s), staff will work with the neighborhood to assess needs, identify alternative plans/solutions, and select a proposed plan based on sound engineering practices. If appropriate, a committee of representatives of the neighborhood may be formed for larger, more complex projects. The City Traffic Engineer, working with the neighborhood, will determine committee membership, meeting needs, and coordination with the neighborhood.

The cost of implementing the plan and the cost of maintenance shall be considered in selecting the plan.

Traffic calming strategies that are likely to cause a significant increase in the traffic volume on another street shall not be used. Exceptions will be made if it can be

shown that the diversion is a desirable one (e.g., if through trips are diverted from a neighborhood route to a collector or arterial). If the traffic calming strategy is expected to cause an increase greater than 10% in traffic volume on another street, the affected area will be included in the support survey.

#### 8. Support Survey:

A survey will be conducted by the City to determine support for the selected plan for the proposed traffic calming project. The survey area will be determined by the City Traffic Engineer in accordance with the *Project Area Guidelines*. The survey area will be based on the selected plan and may be different from the project area of Step 4.

The City will distribute the survey form, and perform the survey analysis. In tallying survey responses, the City will consider only the responses received within 21 calendar days after the date that the survey forms are mailed or otherwise distributed.

For each tax lot within the survey area, one person may respond as a representative of the property owner(s). In addition, for each residential unit and each business in the survey area, if the occupant of the unit is not the property owner, one person may respond as a representative of the tenant(s) of the unit.

The survey response form shall include the option to abstain. In order to be counted as an abstention, the survey response form shall be returned to the City with the desire to abstain clearly indicated.

The project will proceed to Step 9 only if the survey results indicate support from at least a 67% majority of all the identified property owners, households and business owners in the survey area. Where the property owner or tenant has chosen to abstain, the property or rental unit shall be deducted from the total number of properties and rental units prior to calculating the 67% majority.

## 9. Traffic Commission Public Hearing:

The Traffic Commission shall hold a noticed public hearing to take testimony to determine its recommendation on implementation of the selected plan. The Traffic Commission recommendation will be forwarded to the City Council for final action as required under the Major Issue procedures.

If appropriate and practicable, the Traffic Commission may recommend the installation of temporary traffic calming measures for a trial period. The trial period shall be a minimum of two months and a maximum of six months. The duration of the trial period will be specified by the Traffic Commission in its recommendation. Staff will collect traffic data before and after the installation of the temporary measures to evaluate the effectiveness of the measures. Steps 8 and 9 shall be repeated following the conclusion of the trial period.

#### 10. City Design Review:

The City will process the appropriate application(s) and follow the adopted procedures for public review of the project. Upon Council approval, the project will be implemented.

#### 11. Project Monitoring:

Implemented projects will be monitored after the first and third years. The City Traffic Engineer will provide an annual monitoring report to the Traffic Commission for review. Any recommendations for modifications to a project and any recommended Traffic Control Board and/or Traffic Commission action will be included in the report.

#### 12. Removal of Traffic Calming Measures:

The Traffic Commission will consider removal of traffic calming measures if a petition is received indicating that at least 67% of the properties within the Project Area support the removal. If written evidence is submitted clearly indicating that the owner of a property or tenant has chosen to abstain, the property or rental unit shall be deducted from the total number of properties and rental units prior to calculating the 67% majority. The Project Area boundary will be determined by the City Traffic Engineer in accordance with the **Project Area Guidelines.** Only one person may sign the petition for each property and only one for each rental unit. The request will be processed through the Traffic Control Board/Traffic Commission Major Issue process.

# **ELIGIBILITY CRITERIA**

Streets may be considered for installation of traffic calming devices when all of the following criteria are met:

- 1. The neighborhood has participated in Phase One of the Traffic Calming Program, to an appropriate level as determined by the City Traffic Engineer.
- 2. The posted speed is 30 mph or less.
- 3. The 85<sup>th</sup> percentile speed of vehicles is at least 5 mph over the posted speed, or cut-through traffic exceeds 25% of total volume on the street. Cut-through traffic means those vehicles having neither an origin nor a destination in the neighborhood.
- 4. The street is not a primary emergency response route.
- 5. The street is a two-lane street.

The City Traffic Engineer may approve exceptions to items 1 through 5 on a case-by-case basis.

# **PROJECT AREA GUIDELINES**

All properties within the Project Area shall be considered in determining the percentage of support shown by project petitions or surveys. Project notices and surveys sent by the City shall be sent to all properties in the Project Area. For each survey or petition, the City Traffic Engineer will determine the Project Area boundary based on the following guidelines.

- 1. The Project Area shall include all properties directly abutting a street or portion of a street where traffic calming is proposed. The Project Area shall include properties abutting the street for 250 feet beyond the last proposed traffic calming measure.
- 2. The Project Area may include all properties directly abutting a street or section of a street significantly impacted by proposed traffic calming on another street. A street will be considered significantly impacted if proposed traffic calming measures can be expected to cause an increase greater than 10% in traffic volumes on the street.
- 3. The Project Area may include properties along side streets if they are located within 250 feet of a potential traffic calming measure.
- 4. The City Traffic Engineer may amend the project area to include additional properties affected by the proposed traffic calming program or to exclude properties clearly not affected by the proposed program.

Petitions and surveys are intended to solicit the opinions of those who live or work adjacent to proposed traffic calming measures. These are the people most likely to benefit from traffic calming measures. They are also the people most impacted by negative aspects of traffic calming, such as increased traffic noise, neighborhood appearance, or diversion of traffic to new routes.

# PROJECT RANKING CRITERIA AND SCORING PROCESS

Eligible projects will be prioritized for funding using the following factors. The project scoring the highest number of points will receive the highest ranking. The project's score shall be the sum of the following seven factors:

- 1. Speed: Ten points for each mph the 85<sup>th</sup> percentile speed is over the base speed. The base speed is 10 mph over the posted speed for collectors, and 5 mph over the lawful speed for local and neighborhood routes. Maximum 40 points.
- 2. Speed: The percent of vehicles over the posted speed limit divided by 3 and rounded to the nearest whole number. Maximum 30 points.
- 3. Traffic Volume: The average weekday traffic volume divided by 100 and rounded to the nearest whole number. Maximum 30 points.
- 4. Collisions: The number of reported correctable collisions over the past five years. Correctable collisions are those that could have been prevented by the installation of traffic calming measures. (Examples: If the collision resulted from high speed, it could potentially have been prevented by installation of speed-reducing traffic calming measures. If the collision involved backing into a parked car, traffic calming would not have prevented the collision.)
- 5. Sidewalks: Five points if the street has no sidewalk, pedestrian pathway or paved shoulder. Zero points if pedestrian facilities are present.
- 6. School Proximity: Five points if a school abuts the subject street, or if the street includes a marked school crossing serving an elementary school.
- 7. Pedestrian Generator Crossing: Fire points if there is a location along the street where an average of 10 or more pedestrians per hour cross the street during any 8 hours of one or more days of a typical week (i.e., a total of 80 or more pedestrians in the 8-hour period).